

**AD-HOC WORKING GROUP ON LHC EXPERIMENT-MACHINE
PARAMETER AND SIGNAL EXCHANGE**

Minutes of the 8th Meeting held on 27 January 2003

Present: R. Assmann, N. Ellis, D. Evans, K. Gill, P. Graftstrom, R. Jones,
M. Lamont, D. Macina, A. Moersch, A. Smith, W. Smith, E. Tsismelis

1. INTRODUCTION

The minutes of the 7th Meeting were approved without modification.

ALICE has requested an evaluation of the luminous region around the IPs in the case of heavy-ion running. As for the study for proton-proton collisions, these calculations should take into account the following features of the machine: number of bunches, particles per bunch, the revolution frequency, transverse and longitudinal beam sizes, the geometry of the beam crossing region (including the β^*), the beam crossing angle and the hourglass effect (whereby the transverse beam size depends on the longitudinal coordinate s). A report will be given at the next meeting of the Working Group.

Action: B. Muratori

D. Evans reported that the read-out electronics for the ALICE T0 detector may serve the needs of the BPTX. Continuation of the studies along these lines is encouraged.

Action: D. Evans

2. CROSSING ANGLE STABILITY

The TOTEM dedicated runs will be made at zero beam crossing angle. The quoted possibility to measure the crossing-angle with the beam instrumentation to an accuracy of $\pm 6 \mu\text{rad}$ could significantly reduce the acceptance of the TOTEM Roman Pots and hence of the total cross-section measurement since the physics measurements are performed in the forward region at angles of less than $3 \mu\text{rad}$. Such an uncertainty might also have implications for the other experiments, and the collaborations are invited to evaluate the effect of this uncertainty. Moreover, the variation of the crossing angle over a fill needs to be studied.

Action: W. Herr

3. DISCUSSION ON UPDATING THE USER REQUIREMENTS FOR THE LHC DATA EXCHANGE

In preparation for the discussion in March on updating the user requirements for data exchange at the LHC, a preliminary discussion reviewing the requirements as set out in Phase 1 of the LHC Data Interchange Working Group (LDIWG) was held. It was re-iterated that the various users of the CERN-wide data exchange system should consult the report appended to these minutes in view of a further discussion in March.

4. A.O.B.

Meetings of the WG will be held on the following Mondays starting at **16:00** in the **Conference Room Bat. 14-4-030**.

Remaining Provisional Dates for 2003 Meetings:

31 March
12 May
7 July
18 August
13 October
10 November
15 December